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ABSTRACT

A comparison was made of the results of two locator tests, the Zip Test (ZT) and the Wide Range Achievement Test (WRAT), which were administered to 37 black migrant and resident pupils. The children were tested twice with each test: in early September and eight weeks after in November. Twenty-three children were taught by the Inquiry Method (Experimental) and 14 in the conventional mode (Controls). Results indicated that the ZT was a more reliable indicator than the WRAT for a child's grade location in math and reading, if the ZT undergoes modification in administration and scoring instructions. Neither test should be used diagnostically. (Author)

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LOCATOR TESTS: USEFUL OR ORNAMENTAL?

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Objective; The purpose of this project, which was ancillary to a major project funded by the New York State Migrant Center, was to compare the results of two locator tests administered to fifth and sixth grade migrant and stay-grant children.

Background Information: Attempts to place migrant children in productive learning situations have often been frustrating. Most of these children have a language handicap, whether it stems from problems with a second language, such as Spanish, or from home environments that do not encourage prowess in English acceptable to the middle class. A great many of these youngsters move with their families so frequently that their stay at a particular school usually amounts to no more than putting in one's time. Compounding this situation is the fact that these children often arrive at a new school with no records or other evidence to indicate where they should be located in their school work.

One way to solve at least part of this dilemma could be to have each migrant child's reading and mathematics ability assessed quickly and accurately upon his arrival at a new school. The trick in this situation is wrapped up in the word "quickly." Diagnostic tests might be the answer, if one wished to place

the child accurately, within two weeks of his "true" working level. but the problem with these tests is that they are difficult and expensive to administer, often requiring an extended length of time to complete on a one to one basis. Since migrant children often show up at a new school in groups of 15-20, with no records, it is obvious that the diagnostic test route is not a practical one.

A second way to solve the problem could be to use locator tests which have the capability of placing a child into a grade level situation quickly, but not as accurately as can a diagnostic test. These tests generally can place a child quickly into a situation within three months of his working level. In most cases, a location of a child this close to his working level is useful enough. But a problem presents itself when locator tests are used on a pretest/posttest basis during school situations lasting only about eight weeks; e.g., summer school programs for migrant children or the fall attendance of migrant children in upstate New York. If a migrant child does make a gain in reading during a summer school session, how do we know if this is "true" gain or one within the measurement error of the instrument?

Since locator tests have been used recently to assess gains or losses that migrant pupils might make during summer, or shortened school sessions, it is important that the usefulness of this type of instrument as an indicator of a child's working level in reading and mathematics be determined.

For instance, concurrent validity has a correlation of .78 with teachers' ratings and 29 fifth grade students' WRAT scores. Correlation of the WRAT with achievement tests varies from .42 for the WRAT reading with WISC comprehension subsection to .72 with the WISC arithmetic section (N = 300).

2. The Zip Test was developed in response to a need for a locator test that could be administered by any available adult in order to determine quickly and with reasonable accuracy the grade placement of a migrant child in reading and math and assess his English language facility. The purpose of the test was to locate the instructional level at which a Spanish-speaking migrant child could effectively use a mathematics book and a reader and to indicate his ability to conceptualize verbally in the English language. It must be emphasized at this point that the test is not a diagnostic tool, but a locator test. The test was developed, using elementary-school migrant children in four counties in California during 1968-69. The test consists of three sections: Language facility: measuring the child's ability to conceptualize in English; Reading: recognizing and pronouncing words, comprehending the meaning of paragraphs to read, and recognizing and naming word opposites; and Math: performing written computations. The test comes in one form and is suitable for use with children between 5 and 12 years of age.

The reliability coefficients, based on a test-retest a week apart are: .97 for reading and .93 for math (N = 125). The

concurrent validity results were determined by using sixteen teachers and 69 migrant children. Each teacher visited another school to interview a child for approximately 30 minutes in order to place a child in a reader or math book and indicate his language facility. The Zip test results for these same children were then compared to the teacher's placement. The validity coefficients were .93 for reading, .94 for math, and .77 for language facility. A second round of concurrent validity for the latter section was needed. In a second effort to increase the validity coefficient 126 children were involved. This time the correlation of the test with the independent teacher's judgement was .895, a more respectable level.

3. The third instrument was a questionnaire for the teachers, an open-ended form which asked for their reaction to the 1) administration of a test section; 2) the way their pupils reacted to a given test section; 3) thoughts on scoring a section; 4) usefulness of test results; and 5) any other thoughts on a given section.

Data Analysis: Three methods were employed to analyze the data generated from the pre and posttesting situations. These are:

1. The average grade level placement for math and reading were graphed out.
2. Correlations were obtained between the math and reading scores and the corresponding New York State Elementary Reading and Math Test scores for these children.

3. The teachers' reactions to each test were obtained from a questionnaire and then summarized.

Results and Discussion: For reading (See Fig. 1), both the WRAT and the ZT showed a gain in reading level between pre and posttesting, which is expected under most circumstances. The WRAT test results show that children went from an average grade-level score in reading from 5.1 at pretesting to 5.6 at posttesting. For these same children, the Zip test results were from 4.2 at pretesting to 4.7 at posttesting. The results for both tests indicate a jump of about five months in reading level, which is a bit more than one would expect for 8 weeks of instruction. Of the tests, the Zip Test has a more conservative placement factor than the WRAT.

For math, both tests were more in line with what one would expect for a gain in two months of instructional time. WRAT results were from 4.2 at pretesting to 4.3 at posttesting. Zip Test results were from 4.1 at pretesting to 4.4 at posttesting.

The above data support the notion that neither test is very accurate for location in reading and both tests seem to be satisfactory for math.

The results of the correlations of the WRAT and Zip Test Math and Reading grade level scores with the respective New York State Test scores are reported in Table 1. These results tend to support the thought that only the reading section of the Zip Test shows acceptable

correlations with the total reading scores of the New York State Elementary Reading and Math Tests. The pretest correlation is .80, the posttest .88. One must keep in mind that these results must be conditionally acceptable since we are dealing with an N of 22.

A charting of the comments of the teachers from the WRAT and Zip Test questionnaire is contained in Table 2. On the whole the teachers were most positive about the usefulness of the Zip Test results for math and reading. They were moderately positive about the administration of the Zip Test reading section and the pupils' reaction to the administration of the Zip Test reading section. Moderately negative results were expressed about the pupils' reaction to the WRAT math section and scoring the math and reading sections of both tests. In general, the teachers have indicated that the Zip Test is clearly the test of choice on most counts. But, a word or two of caution is in order here. The teachers have also indicated that scoring the sections of the Zip Test was a point of issue. Pointing up the problem on scoring the Zip Test were remarks such as these taken from the questionnaire: "Word opposites directions are not clear" or on math "What criteria should you use for performance at a certain level?" This information shows that modifications are needed in the directions for administering and scoring the Zip Test.

In summary, the results of this study indicate that neither test has the accuracy necessary for its use as a diagnostic tool.

The fluctuations of both tests between pre and posttestings, particularly in reading preclude their use for this purpose.

Educational Importance: The prevailing practice among many school districts is to use locator type tests to establish the gains pupils make during summer school sessions. The data in this study show that this practice should end, since these tests are not appropriate on a test-retest basis, if the lapsed time between testings is about eight weeks. If a given district wishes to test-retest in such a short time span then a diagnostic test should be used or a criterion-referenced testing program based upon clearly specified performance objectives should be employed.

REFERENCES

Jastak, J. F. and Jastak, S. R. The Wide Range Achievement Test. Wilmington, Delaware: Guidance Associates, 1965.

Scott, N. Zip Test. Published by the Butte County Office of Education, in cooperation with the California State Department of Education, 1969.

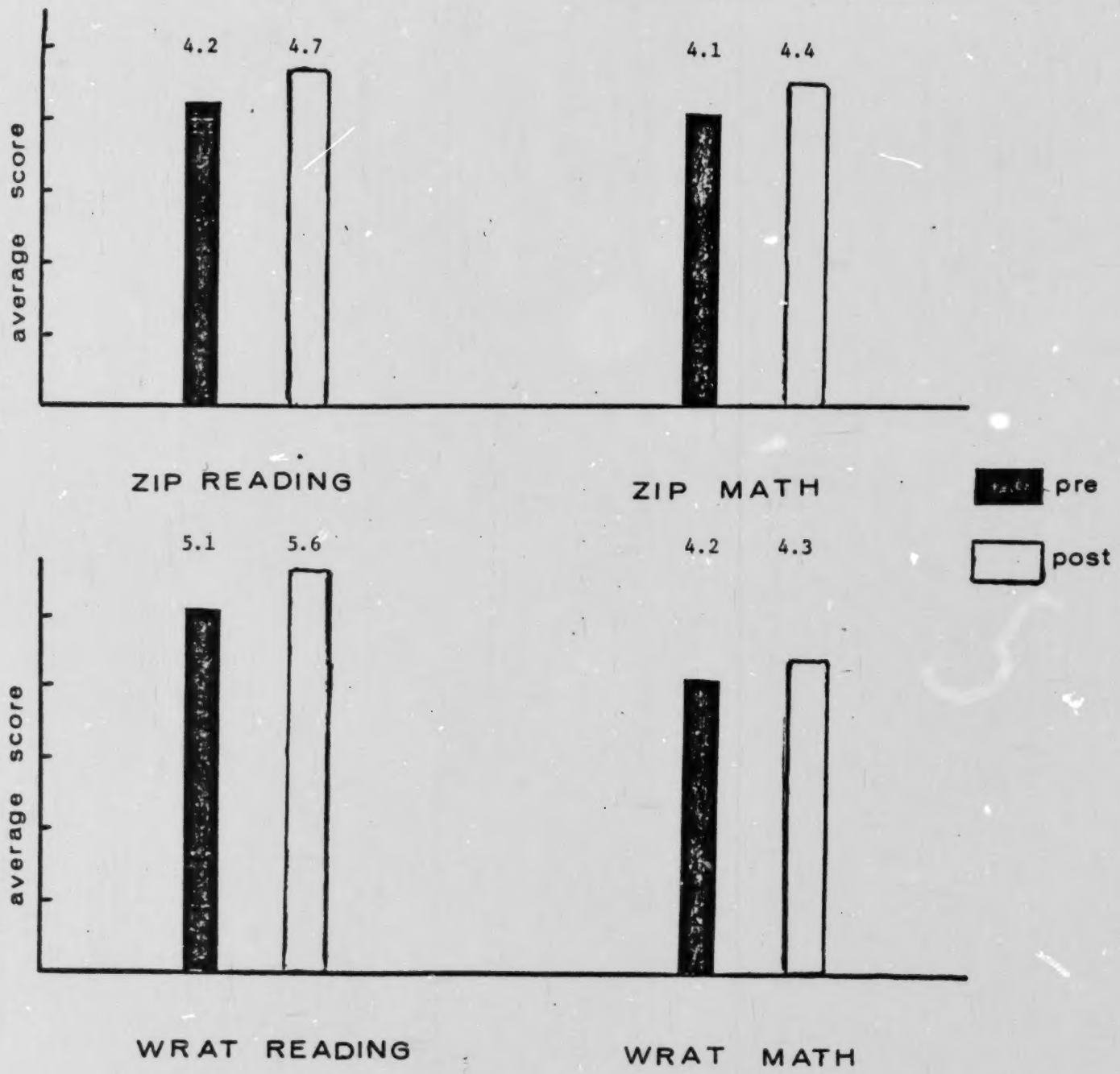

Fig. 1--Pre and Posttesting Results for WRAT and ZIP Tests

TABLE 1

Correlations of the WRAT and ZIP Tests with the New York State Test Scores

N = 22

	Pretesting		Posttesting	
	PEP Math Total	PEP Reading Total	PEP Math Total	PEP Reading Total
WRAT MATH	.69	-	.66	-
ZIP MATH	.64	-	.60	-
WRAT READING	-	.79	-	.74
ZIP READING	-	.80	-	.88

TABLE 2

Summary of Comments from the WRAT and Zip Questionnaire

N = 9

TEST SECTION	TEST	QUESTION	NUMBER OF COMMENTS			
			POSITIVE	NEUTRAL	NEGATIVE	NONE
MATH	WRAT	Administration of	3	-	2	4
	ZIP	section	3	1	3	2
	WRAT	Pupil's reaction	-	1	5	3
	ZIP	to section	3	1	3	2
	WRAT	Scoring this	1	1	4	3
	ZIP	section	-	2	4	3
	WRAT	Usefulness of	-	1	6	2
	ZIP	section	7	2	-	-
READING	WRAT	Administration of	2	1	2	4
	ZIP	section	4	2	-	3
	WRAT	Pupil's reaction	2	-	3	4
	ZIP	to section	5	1	1	2
	WRAT	Scoring this	3	-	4	2
	ZIP	section	1	3	4	1
	WRAT	Usefulness of	-	-	8	1
	ZIP	section	6	1	-	2